



AAG-003-001641 Seat No. _____
Third Year B. Sc. (Sem. VI) (CBCS) Examination
March / April - 2016
Zoology
Z-601 : Functional Anatomy of
Chordates & Comparative
(New Course)
Faculty Code : 003
Subject Code : 001641

Time : $2\frac{1}{2}$ Hours]

[Total Marks : 70

- Instructions :** (1) Illustrate your answer with neat and labeled diagrams.
(2) Figure to the right side indicates full marks of questions.

1 Chose the correct one from multiple options : **20**

- (1) Amphioxus is generally known as _____
(A) Tunicates (B) The lencelet
(C) Sea-squirt (D) Tongue worm
- (2) In structure of teleostean air bladder, the anterior chamber contains a compact mass of interlacking fine capillaries is called
(A) Gas gland (B) Red gland
(C) Rete Mirabile (D) Red body
- (3) Which type of caudal fin is found in elasmobranch?
(A) Diphyccercal (B) Homocercal
(C) Hypocercal (D) Heterocercal
- (4) _____ is the best example of catadromous migration.
(A) Anguilla (B) Salmon
(C) Hilsa (D) Sturgeon
- (5) Axolotal larva is the larva of _____
(A) Toad (B) Salamander
(C) Frog (D) Lizard

- (6) _____ type of skull is the characteristic of turtles.
 (A) Diapsid (B) Synapsid
 (C) Anapsid (D) Perapsid
- (7) _____ is the living fossil that belongs to order Rhynchocephalia.
 (A) Sphenodon (B) Archaeopteryx
 (C) Platypus (D) Kangaroo
- (8) Flightless birds belong to superorder _____ of the subclass Neornithes.
 (A) Neognathae (B) Archaeornithes
 (C) Palaeognathae (D) Rheiformes
- (9) Archaeopteryx is the connecting link between class _____.
 (A) Fishes and Amphibia
 (B) Amphibia and Reptiles
 (C) Reptiles and Aves
 (D) Aves and Mammals
- (10) Which type of kidneys are found in pigeon ?
 (A) Pronephrous (B) Metanephrous
 (C) Mesonephrous (D) None of these
- (11) In Rat, left systemic aorta originated from _____.
 (A) Right auricle (B) Right ventricle
 (C) Left auricle (D) Left ventricle
- (12) Tarsal spur in males is the typical character of order _____.
 (A) Monotremata (B) Marsupialia
 (C) Threia (D) Eutheria
- (13) _____ includes in order Marsupialia.
 (A) Platypus (B) Kangaroo
 (C) Scaly ant eater (D) Rat
- (14) _____ are included in order cetacean.
 (A) Lions and Tigers
 (B) Insectivorous bats
 (C) Whales and Dolphins
 (D) Lemurs and Monkeys

- (15) Cheetah and Jackal are included in order _____
 (A) Chiroptera (B) Carnivora
 (C) Cetacea (D) Primate
- (16) Secretion of which gland is responsible to attract members of opposite sex?
 (A) Femoral gland (B) Sebaceous gland
 (C) Scent gland (D) Mammary gland
- (17) _____ type teeth are characteristic of mammals.
 (A) Thecodont (B) Pleurodont
 (C) Acrodont (D) Lophodont
- (18) 2-chambered, single circuit venous heart is found in _____
 (A) Fishes (B) Amphibia
 (C) Reptiles. (D) Aves
- (19) In development of aortic arches, the connection of lateral dorsal aorta, between carotid and systemic arch is called as _____
 (A) Ductus botali (B) Ductus caroticus
 (C) Ductus arteriosus (D) Radix
- (20) In mammalian brain, centres for the regulation of digestion, circulation and respirations are located in _____
 (A) Fore brain (B) Mid brain
 (C) Hind brain (D) None of these

- 2** (a) Write any three out of six : **6**
 (1) Hybernation and Aestivation in Amphibia.
 (2) Describe order carnivore.
 (3) Parapsid skull in Reptiles.
 (4) Write short notes on Sweat gland and Uropygial gland.
 (5) Give the dental formula of Pig and Goat.
 (6) Aortic arches in fishes.
- (b) Write any three out of six : **9**
 (1) Migration in fishes.
 (2) Characteristic of Ratitae.
 (3) Types of teeth in Vertebrates
 (4) Systematic Position and affinities of Dipnoi.
 (5) Heart in Amphibia.
 (6) Brain in Reptiles.

- (c) Write any two out of five : 10
- (1) Spheonodon as a living fossil and systematic position of it.
 - (2) Describe Venous system of Rat.
 - (3) Compare the aortic arches in Reptiles and Mammals.
 - (4) Describe order Monotremata, affinities and systematic position of it.
 - (5) Digestive system of Pigeon.
- 3 (a) Write any three out of six : 6
- (1) Peculiar character of Archaeopteryx.
 - (2) Parental care in Amphibia with two examples.
 - (3) Seasonal and Latitudinal migration in birds.
 - (4) Describe Poisonous gland and Scent gland.
 - (5) Describe order Primates.
 - (6) Describe succession of teeth in vertebrates.
- (b) Write any three out of six : 9
- (1) Write Short note on Caudal fins in fishes.
 - (2) Describe : Phenomenon of Neotony.
 - (3) Attachment of teeth in Vertebrates.
 - (4) Anapsid and Diapsid skull in Reptiles.
 - (5) Female urinogenital system of Pigeon.
 - (6) Draw a labeled diagram of Digestive System of Rat.
- (c) Write any two out of five : 10
- (1) Structure and Function of Airbladder in fishes.
 - (2) Describe Arterial system of Rat.
 - (3) Evolution and Development of brain in vertebrates and describe the brain of Fishes.
 - (4) Compare the heart of Fishes and Reptiles.
 - (5) Describe order marsupialia, affinities and systematic position of it.
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